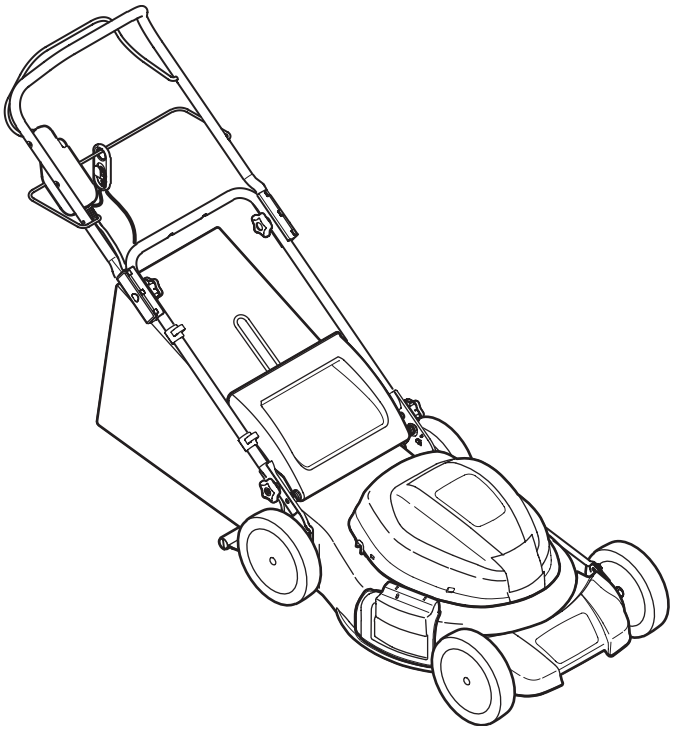
Safe Operation Practices • Set-Up • Operation • Maintenance • Service • Troubleshooting • Warranty

Cub Cadet®

OPERATOR'S MANUAL



Electric Mower — CC 500 EL

⚠ WARNING

READ AND FOLLOW ALL SAFETY RULES AND INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.
FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

CUB CADET LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019

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To The Owner

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Thank You

Thank you for purchasing an Electric Mower manufactured by Cub Cadet. It was carefully engineered to provide excellent performance when properly operated and maintained.

Please read this entire manual prior to operating the equipment. It instructs you how to safely and easily set up, operate and maintain your machine. Please be sure that you, and any other persons who will operate the machine, carefully follow the recommended safety practices at all times. Failure to do so could result in personal injury or property damage.

All information in this manual is relative to the most recent product information available at the time of printing. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Operator's Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models. We reserve the right to change product specifications, designs and equipment without notice and without incurring obligation.

If you have any problems or questions concerning the machine, phone your local Cub Cadet dealer or contact us directly. Cub Cadet's Customer Support telephone numbers, website address and mailing address can be found on this page. We want to ensure your complete satisfaction at all times.

Throughout this manual, all references to *right* and *left* side of the machine are observed from the operating position.

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Record Product Information

Before setting up and operating your new equipment, please locate the model plate on the equipment and record the information in the provided area to the right. You can locate the model plate by standing at the operator's position and looking down at the rear of the deck. This information will be necessary, should you seek technical support via our web site or with your local Cub Cadet dealer.

MODEL NUMBER

SERIAL NUMBER

Product Registration and Customer Support

Please register your product on our website, www.cubcadet.com.

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this machine, you can seek help from the experts. Choose from the options below:

◊ Visit us on the web at www.cubcadet.com

◊ Locate your nearest Cub Cadet Dealer at (877) 282-8684

◊ Write us at Cub Cadet LLC • P.O. Box 361131 • Cleveland, OH • 44136-0019

Important Safe Operation Practices

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WARNING: This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury.
When you see this symbol, **HEED ITS WARNING!**

DANGER: This machine was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating fingers, hands, toes and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

WARNING: When using electric lawnmowers, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury. These basic precautions include the following:

READ ALL INSTRUCTIONS

Double Insulated Lawn Mower

Double insulation is a concept in the safety of electric lawn mowers, which eliminates the need for the usual three-wire grounded power cord and grounded power supply system. Wherever there is electric current in the mower, there are two complete sets of insulation to protect the user. All exposed metal parts are isolated from the internal metal motor components with protecting insulation.

Servicing of a lawn mower with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For repair service we suggest you take the lawn mower to your nearest authorized service dealer. Always use original equipment manufacturer's (OEM) replacement parts when servicing.

Operation

General Operation:

1. Read this operator's manual carefully in its entirety before attempting to assemble this machine. Read, understand, and follow all instructions on the machine and in the manual(s) before operation. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be completely familiar with the controls and the proper use of this machine before operating it.
3. This machine is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times. This machine has been designed to perform one job: to mow grass. Do not use it for any other purpose.
4. Never allow children under 14 years of age to operate this machine. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the machine and be trained and supervised by an adult.
5. Only responsible individuals who are familiar with these rules of safe operation should be allowed to use this machine.
6. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones, toys and other foreign objects which could be tripped over or picked up and thrown by the blade. Thrown objects can cause serious personal injury.
7. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, bystanders and the like. Also, avoid discharging material against a wall or obstruction which may cause discharged material to ricochet back toward the operator.
8. To help avoid blade contact or a thrown object injury, stay in operator zone behind handles and keep children, bystanders, helpers and pets at least 75 feet from mower while it is in operation. Stop machine if anyone enters area.
9. Always wear safety glasses or safety goggles during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.

10. Dress properly – Do not wear loose clothing or jewelry. They can be caught in moving parts. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Shirts and pants that cover the arms and legs, rubber gloves, and rubber soled steel-toed shoes are recommended. Never operate this machine in bare feet, sandals, slippery or light weight (e.g. canvas) shoes. Always use face or dust mask if operation is dusty.
11. Do not put hands or feet near rotating parts or under cutting deck. Contact with blade can amputate hands and feet.
12. A missing or damaged discharge chute can cause blade contact or thrown object injuries.
13. Many injuries occur as a result of the mower being pulled over the foot during a fall caused by slipping or tripping. Do not hold on to the mower if you are falling; release the handle immediately.
14. Never pull the mower back toward you while you are walking. If you must back the mower away from a wall or obstruction first look down and behind to avoid tripping and then follow these steps:
    a. Step back from mower to fully extend your arms.
    b. Be sure you are well balanced with sure footing.
    c. Pull the mower back slowly, no more than half way toward you.
    d. Repeat these steps as needed.
15. Do not operate the mower while under the influence of alcohol or drugs.
16. Stay alert — Watch what you are doing. Use common sense. Do not operate lawn mower when you are tired.
17. The motor/blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The motor/blade control handle must operate easily in both directions and automatically return to the disengaged position when released.
18. Never operate the mower in the rain or in damp or wet grass. Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your footing, release the motor/blade control handle immediately and the blade will stop rotating within three seconds.
19. Mow only in daylight or good artificial light. Walk, never run. Don't force the lawn mower - It will do the job better and safer at the rate for which it was designed.
20. Stop the motor/blade when crossing gravel drives, walks or roads.
21. If the equipment should start to vibrate abnormally, stop the motor and check immediately for the cause. Vibration is generally a warning of trouble.
22. Shut the motor off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the motor is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
23. Never operate mower without proper trail shield, discharge chute, grass catcher, motor/blade control handle or other safety protective devices in place and working. Never operate mower with damaged safety devices. Failure to do so, can result in personal injury.
24. Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the lawn mower. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
25. To prevent electric shock use only with a UL listed extension cord set suitable for outdoor use, such as Type SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A, or SJTOW-A.
26. Extension Cord—Make sure your extension cord set is in good condition and is heavy enough to carry the current load your lawn mower will draw. If in doubt, use the next heavier gauge cord. The smaller the gauge number, the heavier the cord. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

MINIMUM WIRE SIZE FOR EXTENSION CORDS FOR 120 VOLT APPLIANCES USING 10 - 12 AMPS				
Cord Length (ft.)	25	50	100	150
Wire Size (AWG)	16	16	14	12

27. To reduce the likelihood of disconnection of the extension cord set from the mower, be sure to use the cord restraint provided as well as a modern, tightly fitting extension cord.
28. To reduce the risk of electric shock, this lawn mower has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The mower plug will only fit into the polarized extension cord one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way.
29. If extension cord is damaged in any manner during use, disconnect extension cord from house receptacle *before* unplugging mower.
30. Circuit Breaker/Fuses—The mower should be operated on a 15 AMP or 20 AMP circuit. If difficulty in starting is experienced with a standard 15 AMP fuse or circuit breaker or the mower's built-in overload protection switch frequently trips, contact your nearest authorized service dealer. Do not use a higher rated circuit breaker or fuse without consulting your power company.
31. Do not abuse the cord by pulling the mower by the cord or yanking it to disconnect it from the receptacle. Keep cord from heat, oil, and sharp edges.
32. Only use parts and accessories made for this machine by manufacturer. Failure to do so can result in personal injury.

33. If situations occur which are not covered in this manual, use care and good judgment. Contact Customer Support for assistance or the name of the nearest service dealer.

Slope Operation:

Slopes are a major factor related to slip and fall accidents which can result in severe injury. Operation on slopes requires extra caution. If you feel uneasy on a slope, do not mow it. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this machine on a sloped or hilly area. If the slope is greater than 15 degrees, do not mow it.

Do:

1. Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
2. Watch for holes, ruts, rocks, hidden objects, or bumps which can cause you to slip or trip. Tall grass can hide obstacles.
3. Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your balance, release the motor/blade control handle immediately, and the blade will stop rotating within three (3) seconds.

Do Not:

1. Do not mow near drop-offs, ditches or embankments, you could lose your footing or balance.
2. Do not mow slopes greater than 15 degrees as shown on the slope gauge.
3. Do not mow on wet grass. Unstable footing could cause slipping.

Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the mower and the mowing activity. They do not understand the dangers. Never assume that children will remain where you last saw them.

1. Keep children out of the mowing area and under watchful care of a responsible adult other than the operator.
2. Be alert and turn mower off if a child enters the area.
3. Before and while moving backwards, look behind and down for small children.
4. Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your vision of a child who may run into the mower.

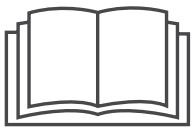
Never allow children under 14 years of age to operate this machine. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the machine and be trained and supervised by an adult.

Service

1. When servicing mower, use original equipment manufacturer (OEM) replacement parts listed in this manual. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
2. Before cleaning, repairing, or inspecting, make certain the blade and all moving parts have stopped. Disconnect the power cord when not in use and to prevent unintended starting.
3. Follow instructions for lubricating and changing accessories.
4. Inspect lawn mower cord and extension cords periodically and replace immediately, if damaged. Lawn mower cord should be repaired by an authorized service dealer only.
5. Keep handles dry, clean and free from oil and grease.
6. To reduce a fire hazard, keep the motor free of grass, leaves and debris build-up.
7. Check the blade and motor mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade for damage (e.g., bent, cracked, and worn) Replace blade with the original equipment manufacturer's (OEM) blade only, listed in this manual.
8. Maintain your mower with care — Keep mower blade sharp and clean for best and safest performance. Mower blades are sharp and can cut, wrap the blade or wear gloves and use extra caution when servicing them.
9. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
10. Never tamper with safety devices. Check their proper operation regularly.
11. After striking a foreign object, stop the motor and disconnect the power cord. Thoroughly inspect the mower for any damage. Repair the damage before operating the mower.
12. Grass catcher components, discharge cover, and trail shield are subject to wear and damage which could expose moving parts or allow objects to be thrown. For safety protection, frequently check components and replace immediately with original equipment manufacturer's (OEM) parts only, listed in this manual.
13. When not in use, store lawn mower indoors in a dry area, locked-up and/or out of the reach of children.
14. Maintain or replace safety and instructional labels, as necessary.
15. According to the Consumer Products Safety Commission (CPSC) and the U.S. Environmental Protection Agency (EPA), this product has an *Average Useful Life* of seven (7) years, or 140 hours of operation. At the end of the *Average Useful Life* have the machine inspected annually by an authorized service dealer to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries or death

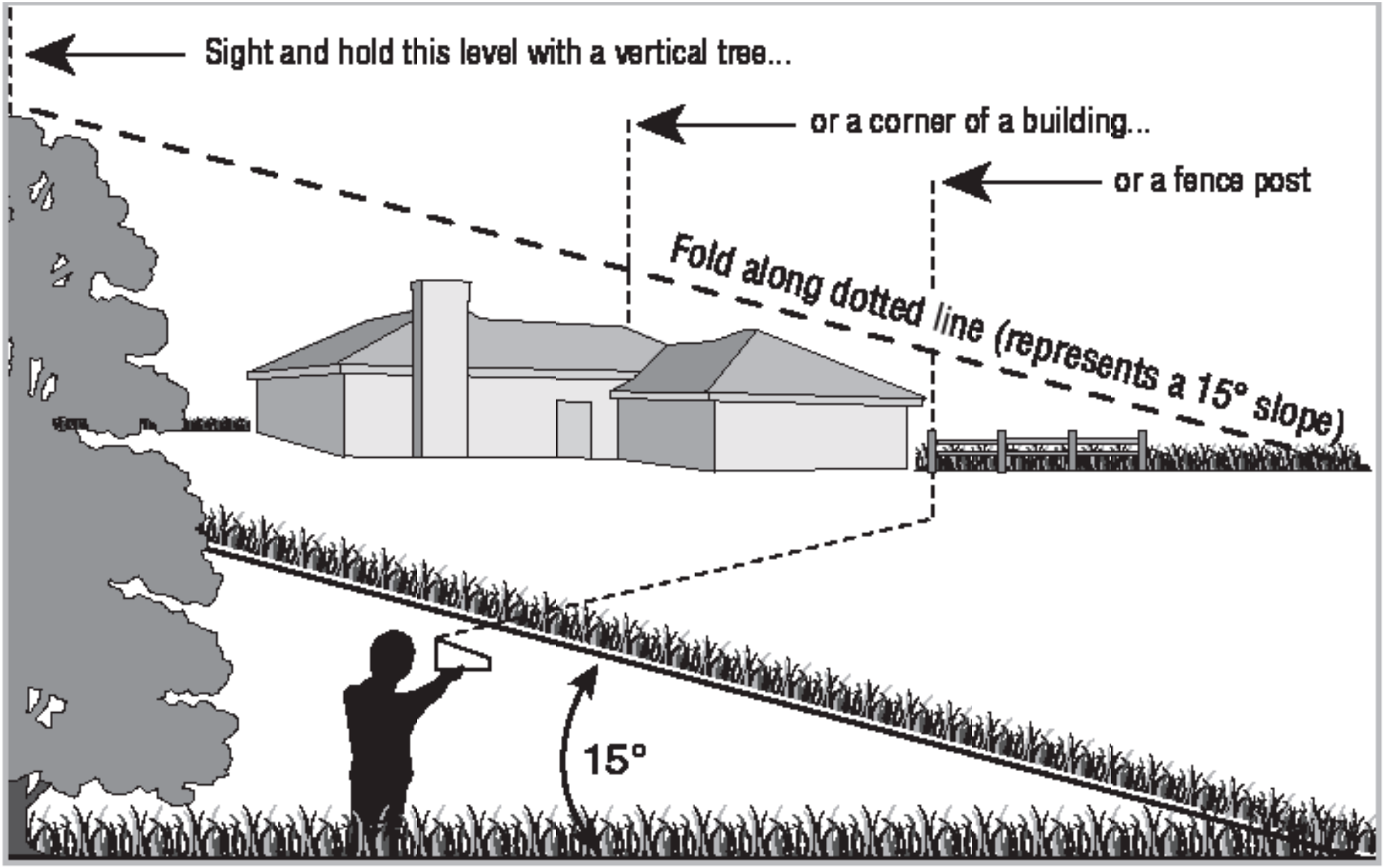
Safety Symbols

This page depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbol	Description
	READ THE OPERATOR'S MANUAL(S) Read, understand, and follow all instructions in the manual(s) before attempting to assemble and operate
	DANGER — ROTATING BLADES To reduce the risk of injury, keep hands and feet away. Do not operate unless discharge cover or grass catcher is in its proper place. If damaged, replace immediately.
	DANGER — BYSTANDERS Do not mow when children or others are around.
	DANGER — HAND/ FOOT CUT Keep hands and feet away from rotating parts.
	DANGER — THROWN DEBRIS Remove objects that can be thrown by the blade in any direction. Wear safety glasses.
	DANGER — SLOPES Use extra caution on slopes. Do not mow slopes greater than 15°.
	WARNING— ELECTRICAL SHOCK Do not operate the mower in the rain.

WARNING: Your Responsibility—Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

SAVE THESE INSTRUCTIONS!


Sight and hold this level with a vertical tree...
or a corner of a building...
or a fence post
Fold along dotted line (represents a 15° slope)
15°

Use this page as a guide to determine slopes where you may not operate safely.

WARNING! Do not operate your lawn mower on such slopes. Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. Operate riding mowers up and down slopes, never across the face of slopes. Operate walk-behind mowers across the face of slopes, never up and down slopes.

Assembly & Set-Up

3

Contents of Carton

- One Lawn Mower
- One Cord Guide Bar
- One Grass Catcher
- One Lawn Mower Operator's Manual
- One Side Discharge Chute

Assembly

Handle

1. Remove any packing material which may be between upper and lower handles.
   a. Loosen each hand knob found on the inside of the upper handle.
   b. Gently lift and pivot the upper handle into the operating position as shown in Fig. 3-1. Make certain the lower handle is seated securely into the handle mounting brackets.

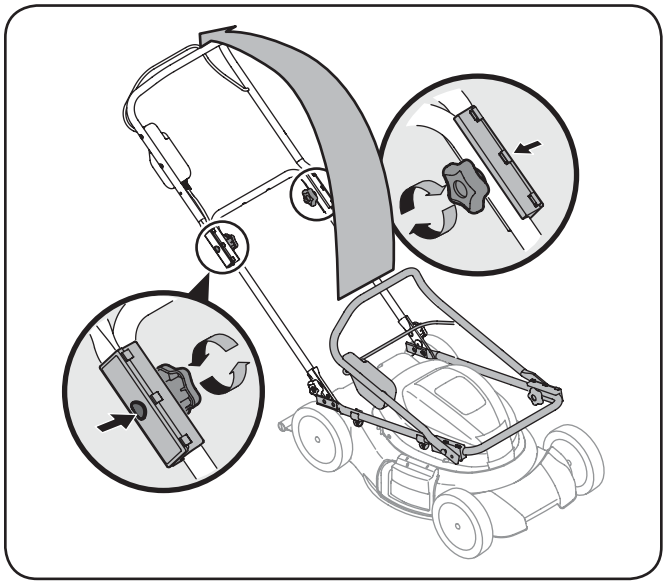


Figure 3-1

2. Tighten star knobs securing lower handle to handle brackets. See Fig. 3-2. Make certain the lower handle is seated securely into the handle mounting brackets.

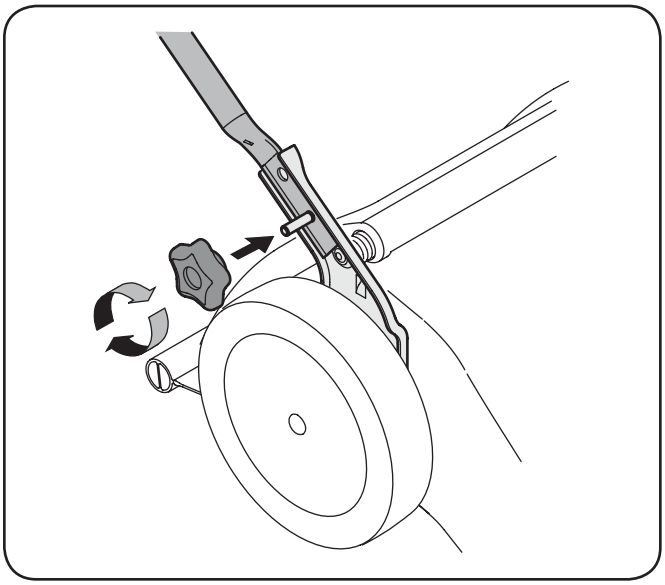


Figure 3-2

Cord Guide Bar

Attach the cord guide bar with extension cord retainer to the upper handle as shown in Fig. 3-3.

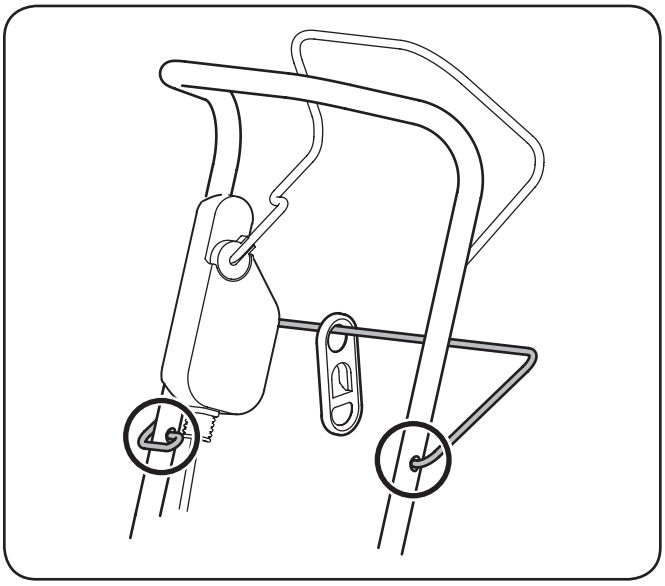


Figure 3-3

NOTE: Do not plug your extension cord into the power source receptacle (outlet) prior to routing it through the cord retainer and connecting the extension cord to the mower's cord outlet receptacle.

To properly route your extension cord through the cord retainer:

1. Approximately 14- to 16-inches from its end, crease your extension cord to form a tight loop.
2. Push the loop through the bottom hole in the cord retainer. See Fig. 3-4A.
3. Position the loop over the clip found on the cord retainer and pull down until the cord fits snugly into the clip. See Fig. 3-4B.

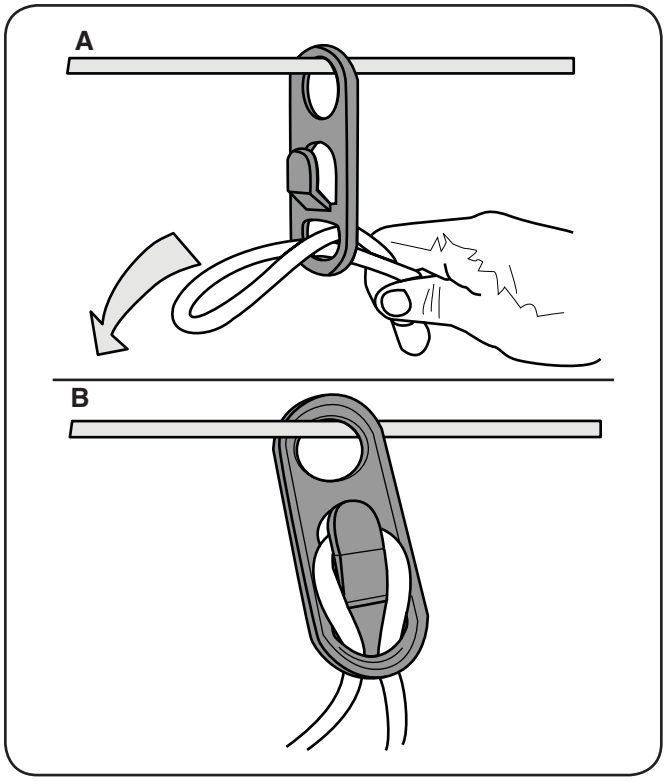


Figure 3-4

NOTE: Use a UL-approved extension cord. A 100-foot, 14-gauge cord is recommended. A 50-foot, 16-gauge cord is acceptable. Refer to the small chart found in Safe Operation Practices.

The cord retainer and the guide bar work together to secure your extension cord and safely limit its movement. The cord retainer (with the extension cord) will slide along the guide bar as the mower is moved to the left or to the right.

Grass Catcher

1. Follow steps below to assemble the grass catcher (if needed). Make certain bag is turned right side out before assembling (warning label will be on the outside).
   a. Place bag over frame so that its black plastic side is at the bottom.
   b. Slip plastic channel of grass bag over frame rods. See Fig. 3-5. All the plastic channels except center top of bag attach from outside of bag.

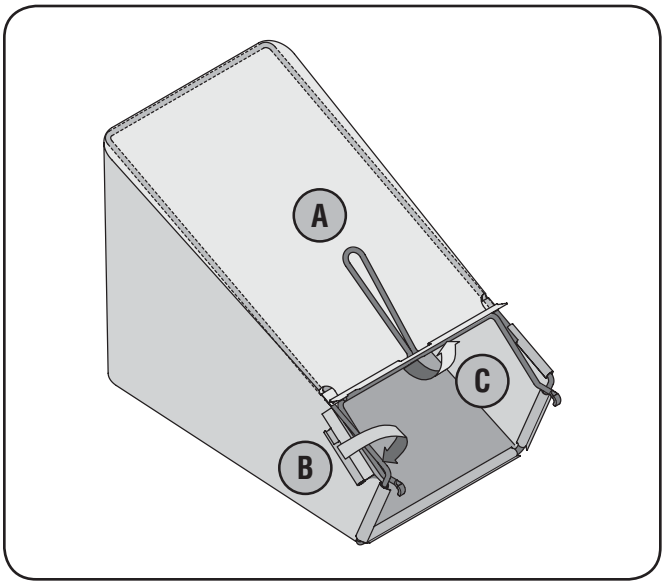


Figure 3-5

   c. Attach center top of bag from inside of bag.

2. Follow steps below to attach grass catcher:
   a. Lift rear discharge door.
   b. Remove rear mulching baffle.
   c. Place grass catcher on the pivot rod. Let go of discharge door so that it rests on the grass catcher. See Fig. 3-6.

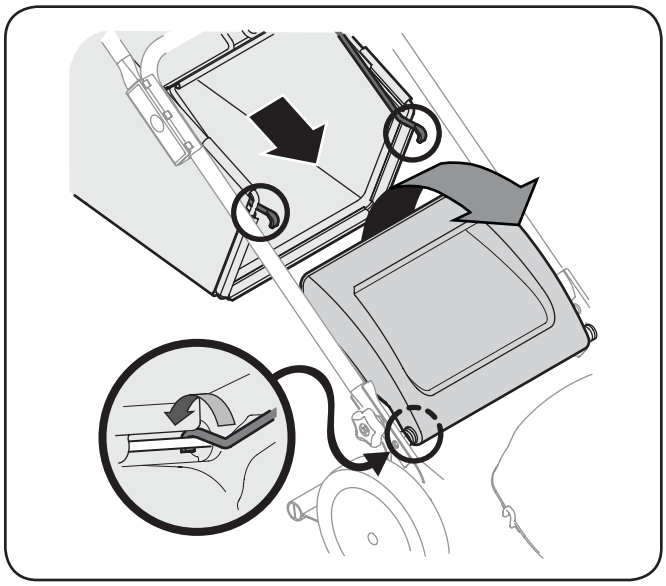


Figure 3-6

To remove grass catcher, lift rear discharge door on the mower. Lift grass catcher up and out, off of the pivot rod. Release rear discharge door to allow it to close rear opening of mower.

WARNING: Never operate mower unless the hooks on the grass catcher are firmly seated on the pivot rod and the rear discharge door rests firmly against the top of the grass catcher.

Side Discharge Chute

To convert to side discharge, make sure grass catcher is off of the unit, the rear mulching baffle is installed, and rear discharge door is closed.

1. On the side of the mower, lift the mulching plug.
2. Slide chute hooks under hinge pin on mulching plug assembly. Lower mulching plug. See Fig. 3-7.

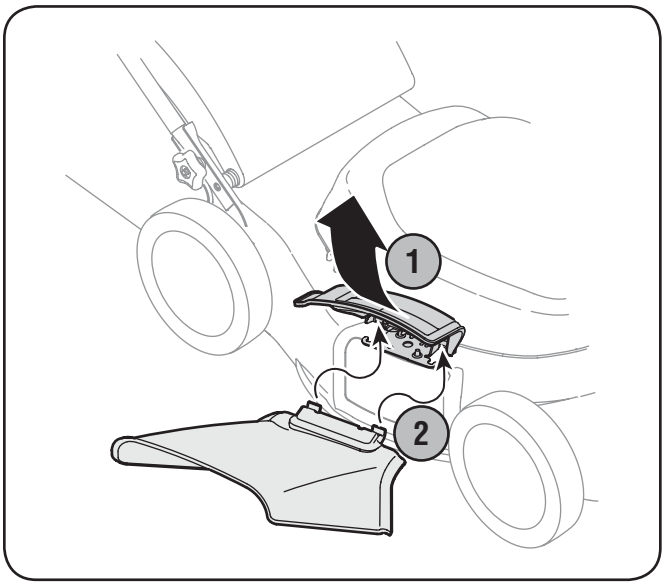


Figure 3-7

NOTE: Do not remove side mulching plug at any time, even when you are not mulching.

Adjustments

1. The cutting height adjustment lever is located above the rear left wheel. See Fig. 3-8.

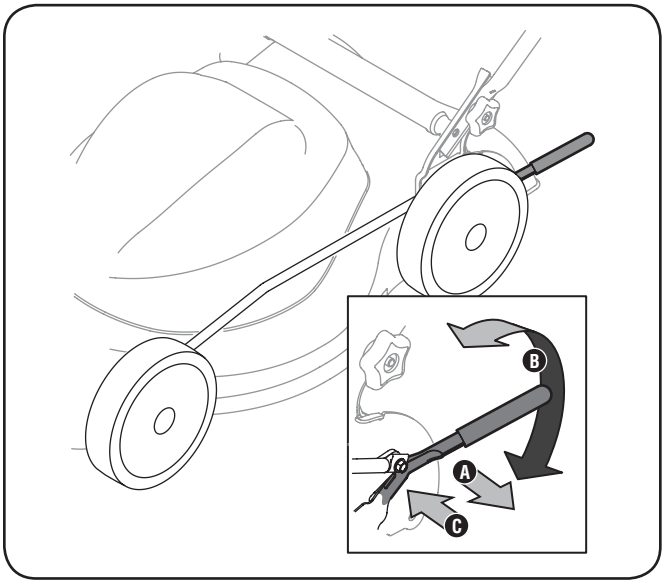


Figure 3-8

   a. Pull the lever out and away from the mower.
   b. Move the lever forward or back for desired cutting height.
   c. Release lever towards mower deck.

Controls and Features

4

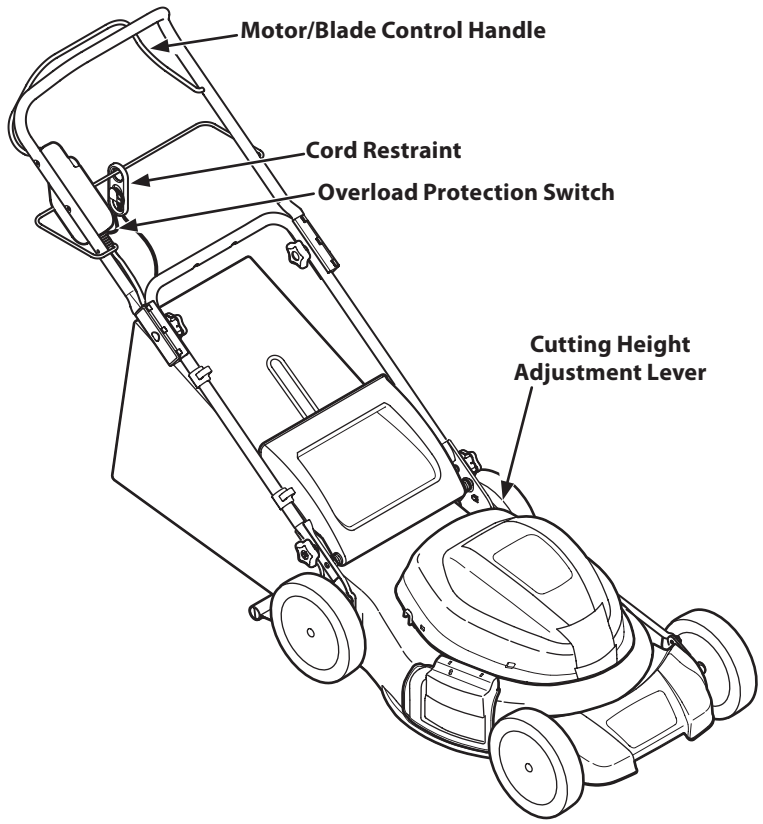


Figure 4-1

Motor/Blade Control Handle

The motor/blade control handle is located on the upper handle of the mower. See Figure 4-1. The motor/blade control handle engages and disengages the motor and blade.

WARNING: The motor/blade control handle is a safety device. Never attempt to bypass its operations.

Overload Protection Switch

The mower is equipped with a overload protection switch, located on the motor/blade control. This overload protection switch may pop out when too much strain is placed on the motor. Refer to Maintenance & Adjustments Section to reset this switch.

Cord Restraint

The cord restraint is located on the back of the upper handle and when used properly, helps to protect the motor/ blade control and extension cord powering the unit.

Cutting Height Adjustment Lever

The cutting height adjustment lever is located above the left rear wheel. To adjust the cutting height, refer to the Assembly & Set-Up Section.

Starting Motor

WARNING: Avoid accidental starting. Make sure you are in the operating position behind the mower when using it. To avoid serious injury, the operator and unit should be in a stable position while starting.

Connecting to an Electrical Power Source

WARNING: This mower should be operated on a 15 or 20 AMP circuit. If you experience difficulty in starting with a standard 15 AMP fuse or circuit breaker, contact you nearest authorized service facility. Do not use a higher rated fuse or breaker without consulting your power company.

NOTE: Connect your extension cord to the mower as instructed in the Assembly & Set Up section prior to plugging your extension cord into an electrical outlet. Refer to Fig. 5-1.

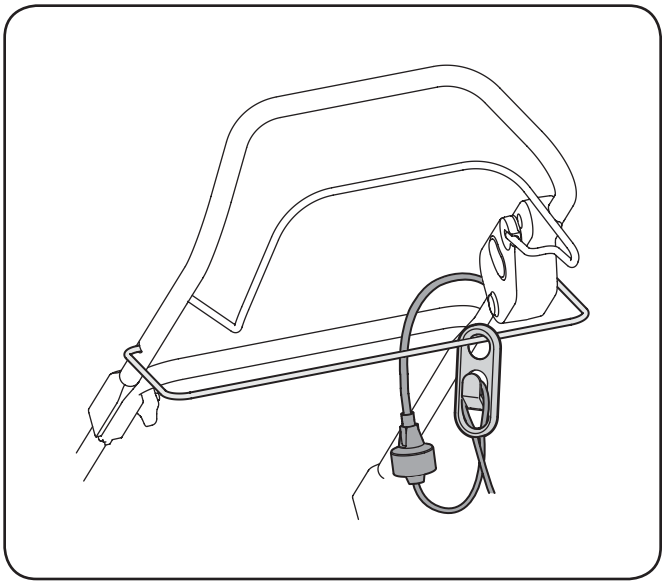


Figure 5-1

1. Plug your extension cord into any convenient (indoor or outdoor) 120-volt, 60-cycle AC outlet or receptacle. Your mower will operate satisfactorily on a circuit with a 15 ampere breaker.

   NOTE: To avoid tripping circuit breakers, select an outlet on a circuit that is not overloaded. Do NOT select an outlet that is on a circuit hosting appliances such as a refrigerator.

2. Stand behind the mower, in the operating position, depress the (red) starter button and hold it in. See Fig. 5-2.

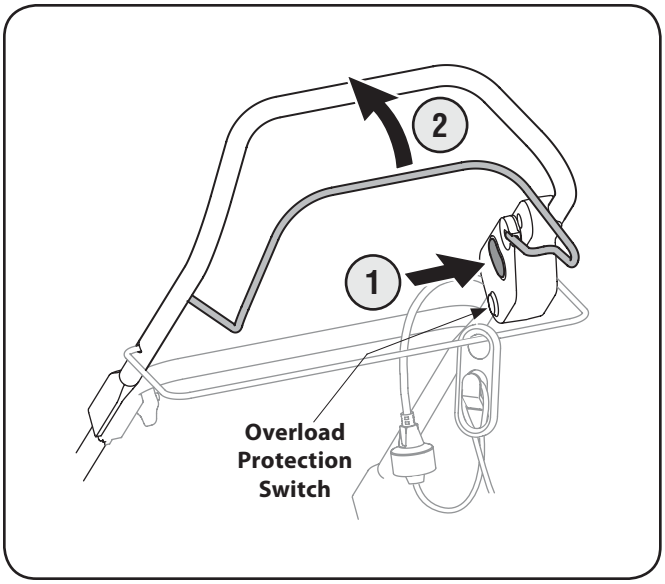


Figure 5-2

NOTE: Starting the mower's motor also engages the blade.

4. While holding the starter button in, pivot the motor/blade control handle upward against the upper handle to start the motor and engage the blade. See Fig. 5-2.

   NOTE: The mower's motor will NOT start if you fail to hold the starter button in while pivoting the motor/blade control handle upward.

5. Release the (red) starter button.

Stopping the Motor

WARNING: The blade continues to rotate for a few seconds after the motor is shut off. If motor does not come to a stop when the motor/blade control handle is released, contact an authorized service dealer.

1. Release the blade/motor control handle to stop the motor and blade.

Using Your Lawn Mower

Be sure that lawn is clear of stones, sticks, wires, or other objects which could damage the lawn mower or motor. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.

WARNING: If you strike a foreign object, stop the motor, and unplug from the power supply circuit. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower. Excessive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

- To prevent electric shock, do not operate the mower in damp or wet conditions.
- Always start from the point closest to the power source where the cord is connected. Never mow around the lawn in circles; travel back and forth across the lawn, starting from the point closest to the outlet and then moving away from the outlet so the cord lies in the cut portion of the lawn, out of the way.
- Do not allow the extension cord to wrap around trees, shrubs or other obstacles. When picking up the extension cord, wind the cord in a series of equal loops on each side of your hand to prevent snarling.

Using as Mulcher

For mulching grass, remove the grass catcher or side discharge chute from the mower. For effective mulching, do not cut wet grass. If the grass has been allowed to grow in excess of four inches, mulching is not recommended. Use the grass catcher to bag clippings instead.

Using Grass Catcher

You can use the grass catcher to collect clippings while you are operating the mower.

1. Attach grass catcher following instructions in the Assembly & Set-Up section. Grass clippings will automatically collect in bag as you run mower. Operate mower till grass bag is full.
2. Stop motor completely by releasing the blade/motor control handle. Make sure that the unit has come to a complete stop.
3. Lift discharge door and pull grass bag up and away from the mower to remove the bag. Dispose of the grass clippings and reinstall the bag when complete.

Maintenance & Adjustments

6

Maintenance

General Recommendations

- Always observe safety rules when performing any maintenance.
- The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from warranty, operator must maintain the lawn mower as instructed here.
- All adjustments should be checked at least once each season.
- Periodically check all fasteners and make sure these are tight.

WARNING: Always stop the motor and disconnect from the power source before cleaning, lubricating or performing any repairs or maintenance on the lawn mower.

Lubrication

1. Lubricate the wheels at least once a season with light oil (or motor oil). If wheels are removed for any reason, lubricate surface of the pivot arm and inner surface of the wheel with light oil. See Fig. 6-1.
2. Lubricate the torsion spring and pivot point on the rear discharge door and side mulch plug periodically with light oil to prevent rust. See Fig. 6-1.

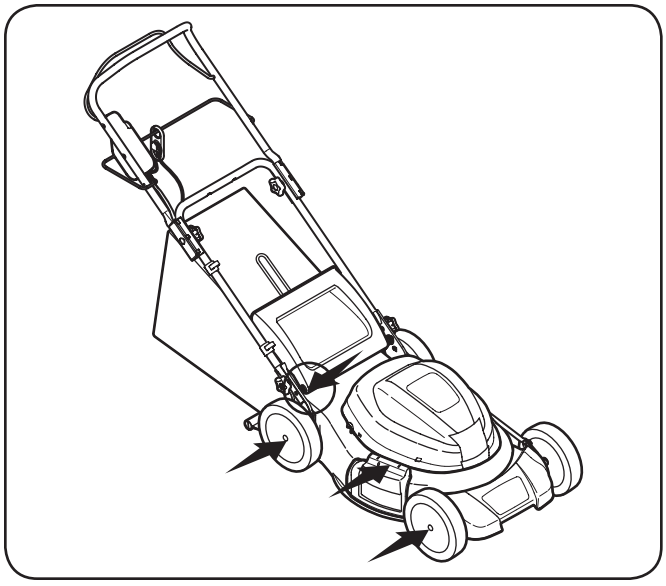


Figure 6-1

Deck Care

WARNING: To reduce the risk of electric shock, do not expose the mower to water.

The underside of mower deck should be cleaned after each use as grass clippings, leaves, dirt and other debris will accumulate. This accumulation of grass clippings, etc., is undesirable as it will promote rust and corrosion.

1. Remove any buildup of grass and leaves on or around the motor cover (do not use water). Wipe the mower clean with a dry cloth occasionally.
2. If debris is allowed to build up on the underside of the unit, tilt the mower forward or on its side and scrape it clean with a suitable tool.

   IMPORTANT: Do not use a pressure washer or garden hose to clean your unit. These may cause damage to electric components, or the electric motor. The use of water will result in shortened life and reduce serviceability.

Resetting Overload Protection Switch

This mower is equipped with an overload protection switch to prevent overheating damage to the motor.

If the overload protection switch pops out:

1. Release the motor/blade control handle and do NOT re-start the mower for at least one minute, allowing for the electric motor time to cool.
2. Press the overload protection switch inward to reset. See Fig. 6-2.

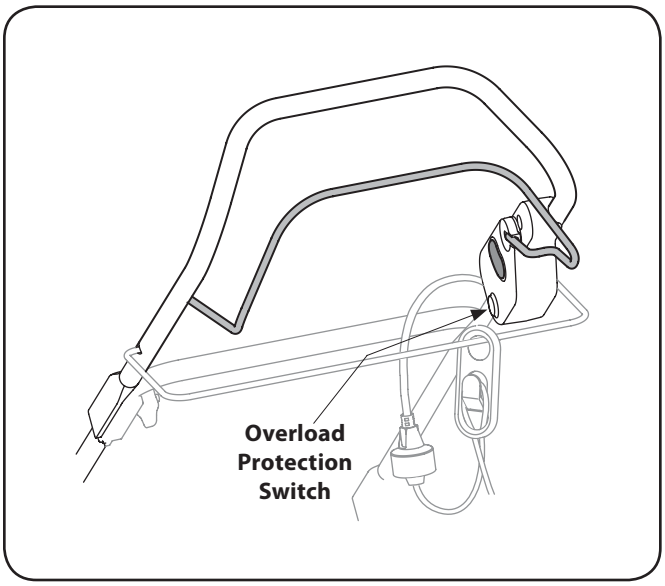


Figure 6-2

If the overload protection switch pops out shortly after resetting:

1. Release the motor/blade control handle and do NOT re-start the mower for at least 15 minutes to allow the electric motor extra time to cool.
2. Press the overload protection switch inward to reset.
3. Restart unit.

   NOTE: If the overload protection switch pops out repeatedly during operation or will not remain in when attempting to reset, contact your Authorized Service Center to arrange for repair.

Replacing Trail Shield

WARNING: Never operate mower unless the trail shield is in place and working. Never operate mower with damaged safety devices. Failure to do so can result in personal injury.

The trail shield is subject to wear and damage which could expose moving parts or allow objects to be thrown. For safety protection, frequently check the trail shield and replace immediately with original equipment manufacturer's (OEM) part only, 731-05639A.

1. To remove trail shield, lift rear door and remove screws holding trail shield in place.
2. Press shield in on either side to remove from hole. See Fig. 6-3.

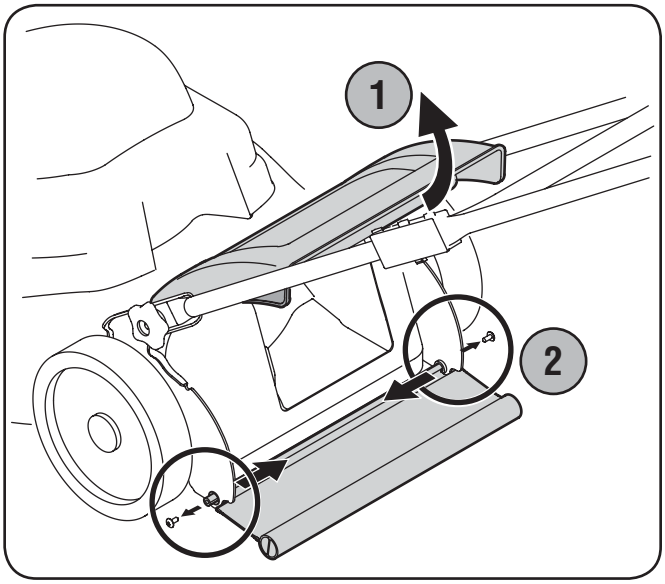


Figure 6-3

3. Remove shield from opposite hole and replace with new shield in the opposite order and manner of removal.

Blade Care

WARNING: When removing the cutting blade for sharpening or replacement, protect your hands with a pair of heavy gloves or use a heavy rag to hold the blade. Be certain to disconnect the power supply.

Periodically inspect the blade assembly for cracks, especially if you strike a foreign object. Replace when necessary. Follow the steps below for blade service.

1. Stop the motor and disconnect the power supply to the mower. Turn the mower on its side.
2. Use a block of wood between blade and mower deck to prevent the blade from turning when the bolt is removed.
3. Loosen and remove the blade bolt, locking plate, and blade. See Fig. 7-1.

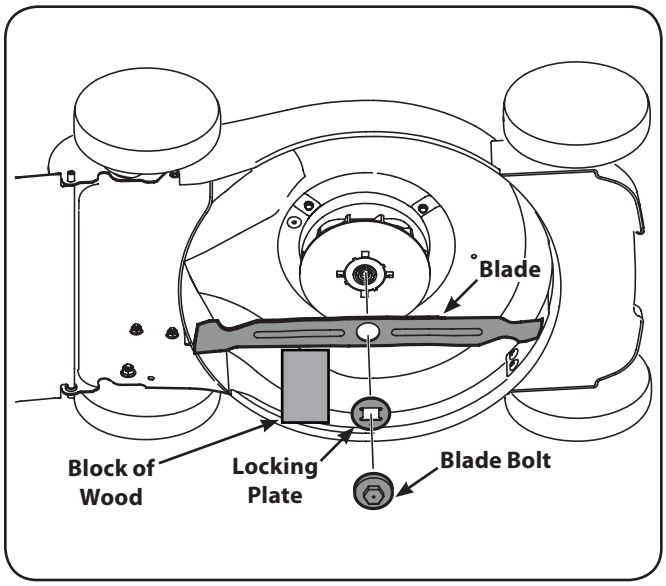


Figure 7-1

4. The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen the blade while it is still on the mower.

Blade Sharpening

To properly sharpen the cutting blades, remove equal amounts of metal from both ends of the blades along the cutting edges, parallel to the trailing edge, at a 25° to 30° angle. See Fig. 7-2.

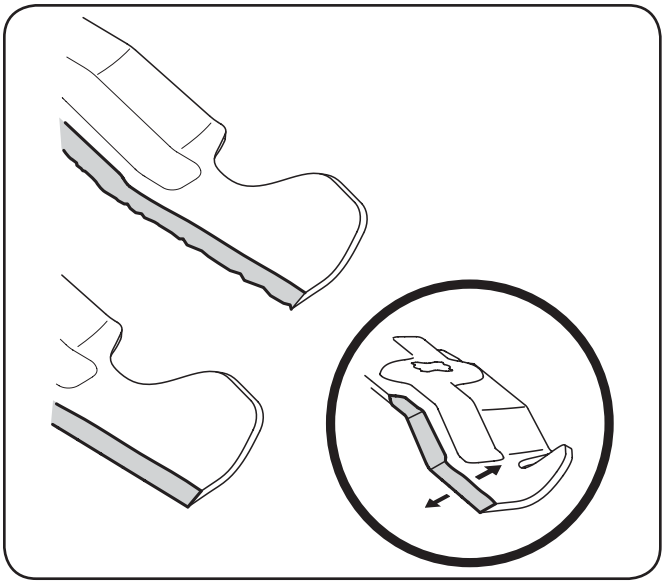


Figure 7-2

NOTE: It is important that each cutting blade edge be ground equally to maintain proper blade balance. The blade can be tested by balancing it on a round shaft screwdriver. Grind metal from the heavy side until it balances evenly.

WARNING: An unbalanced blade will cause excessive vibration when rotating at high speeds. It may cause damage to mower, and could break causing personal injury.

Blade Installation

1. Place the cutting blade, locking plate, and blade bolt on the motor shaft and thread the blade bolt in finger tight. Refer to Fig. 7-1.

   NOTE: Make certain to replace the parts in the exact order in which they were removed. When installing the cutting blade, be sure it is installed with the curved ends pointing towards the mower deck and not towards the ground.

2. Torque the blade bolt down using a torque wrench to assure the bolt is tightened properly. The recommended torque for the blade bolt is 170-220 in. lbs.

WARNING: The blade hardware is not only used to attach the blade assembly, but is also an insulated safety device and should never be altered in any way. If replacement is necessary, use original equipment parts as shown in the parts list.

To insure safe operation of your unit, all nuts and bolts must be checked periodically for correct tightness.

Off-Season Storage

The following steps should be taken to prepare your lawn mower for storage.

- Clean and lubricate mower thoroughly as described in the lubrication instructions.
- We do not recommend the use of a pressure washer or garden hose to clean your unit.
- Make certain the power supply is disconnected.
- Coat mower's cutting blade with chassis grease to prevent rusting.
- Store mower in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.
- Wipe extension cord to remove any foreign substance such as oil or stains. Replace extension cord if cut or damaged in any way.
- Wind cord in a series of equal loops on each side of your hand to prevent snarling.

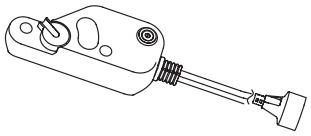
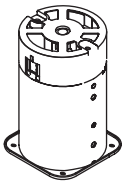
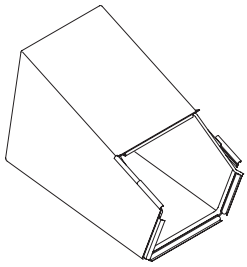
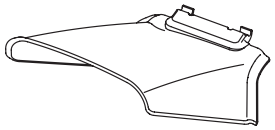
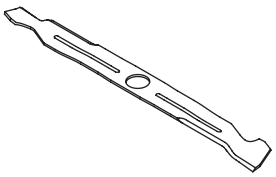
Troubleshooting

8

Problem	Cause	Remedy
Mower fails to start	1. Cord disconnected from the motor/blade control. 2. Motor/blade control defective. 3. Extension cord not connected to the plug on the mower. 4. Extension cord not connected to a source of power. 5. Overload protection switch on the mower or circuit breaker in the house receptacle tripped.	1. Reconnect the cord keeping the cord restraint close to the motor/blade control. 2. Replace motor/blade control. 3. Connect the extension cord to the plug on the mower. 4. Connect the extension cord to a 110-120 volt 60 hertz A.C. receptacle. 5. Reset the overload protection switch following instructions in the Maintenance & Adjustments section of this manual.
Circuit breaker on the mower tripping	1. Too much workload on the mower. 2. Fuse blown; outlet overloaded.	1. Raise the cutting height, reset the circuit breaker on the mower, take a smaller width of cut, and walk slowly. 2. Connect to an outlet that is fused for 15 amperes. Reset the circuit breaker and start the mower again.
Mower cutting grass unevenly	1. Lawn rough or uneven. 2. Cutting height not set properly. (Individual height adjusted models only)	1. Move the wheels to a higher cutting height position. 2. All wheels must be placed in the same cutting height for the mower to cut evenly.
Mower not mulching properly	1. Wet grass clippings stick to the underside of the deck.	1. Wait till the grass dries before mowing.
Hard to push	1. High grass or cutting height too low. 2. Rear of mower housing and blade dragging in heavy grass.	1. Raise cutting height. 2. Raise cutting height.
Mower vibrating at higher speed	1. Bent motor shaft. 2. Cutting blade is unbalanced. 3. Blade is loose.	1. Stop the motor, disconnect the power source and inspect for damage. Repair before restarting. If vibration persists, take it to a service dealer. 2. Balance the blade by grinding each cutting edge equally. 3. Tighten blade bolt to 170-220 in. lbs.
Cord disconnects frequently	1. Extension cord is not properly attached to the cord restraint. 2. Old, worn, or loose extension cord.	1. Reconnect the extension cord to the cord restraint on the guide rod. 2. Replace extension cord.
Handle not in position	1. Carriage bolts not seated in the handle insulators.	1. Adjust the height of the handle and make sure that the carriage bolts are seated properly into the handle insulators. Tighten the hand knobs.

Replacement Parts

9

Component	Part Number and Description	
	925-04035	Switch Assembly
	924-04010	Motor, 120V
	764-04055A	Grass Bag
	731-04177	Side Discharge Chute
	634-04346 634-04347	Front Wheel Rear Wheel
	942-04152	Blade

Contact your Cub Cadet dealer to order replacement parts or a complete Parts Manual (have your full model number and serial number ready). Parts Manual downloads are also available free of charge at www.cubcadet.com.

CUB CADET LLC
MANUFACTURER'S LIMITED WARRANTY FOR
WALK-BEHIND MOWERS

IMPORTANT: To obtain warranty coverage owner must present an original proof of purchase and applicable maintenance records to the servicing dealer. Please see the operator's manual for information on required maintenance and service intervals.

The limited warranty set forth below is given by Cub Cadet LLC with respect to new merchandise purchased or leased and used in the United States and/or its territories and possessions, and by MTD Products Limited with respect to new merchandise purchased or leased and used in Canada and/or its territories and possessions (either entity respectively, "Cub Cadet").

Cub Cadet warrants this product (excluding its *Normal Wear Parts and Batteries,* as described below) against defects in material and workmanship for a period of three (3) years, commencing on the date of original retail purchase or lease and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship.

Normal Wear Parts are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of original purchase or lease. Normal wear parts include, but are not limited to items such as: belts, blades, blade adapters, grass bags, engine oil, air filters, spark plugs and wheels.

Batteries have a one-year prorated limited warranty against defects in material and workmanship, with 100% replacement during the first three months. After three months, the battery replacement credit is based on the months remaining in the twelve (12) month period dating back to the original date of original sale or lease. Any replacement battery will be warranted only for the remainder of the original warranty period.

This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by Cub Cadet for use with the product(s) covered by this manual will void your warranty as to any resulting damage. In addition, Cub Cadet may deny warranty coverage if the hour meter, or any part thereof, is altered, modified, disconnected or otherwise tampered with.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE AND APPLICABLE MAINTENANCE RECORDS, through your local authorized service dealer. To locate the dealer in your area:

In the U.S.A.:
Check your Yellow Pages, or contact Cub Cadet LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, call 1-877-282- 8684
or log on to our website at www.cubcadet.com.

In Canada:
Contact MTD Products Limited, Kitchener, ON N2G 4J1, call 1-800-668-1238 or log on to our website at www.mtdcanada.com.

Without limiting the foregoing, this limited warranty does not provide coverage in the following cases:

a. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.

b. Service completed by someone other than an authorized service dealer.

c. Cub Cadet does not extend any warranty for products sold or exported outside of the United States and/or Canada, and their respective possessions and territories, except those sold through Cub Cadet's authorized channels of export distribution.

d. Replacement parts and\or accessories that are not genuine Cub Cadet parts.

e. Transportation charges and service calls.

f. Cub Cadet does not warrant this product for commercial use.

There are no implied warranties, including without limitation any implied warranty of merchantability or fitness for a particular purpose. No warranties shall apply after the applicable period of express written warranty above. No other express warranties beyond those mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Cub Cadet. The exclusive remedy is repair or replacement of the product as set forth above. The terms of this warranty provide the sole and exclusive remedy arising from the sale and/or lease of the products covered hereby. Cub Cadet shall not be liable for any incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW LOCAL LAWS RELATE TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights that vary in different jurisdictions.

Cub Cadet LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019, Phone: 1-877-282-8684
MTD Products Limited, Kitchener, ON N2G 4J1, Phone: 1-800-668-1238

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